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20. The method of claim 1, wherein the bacterial formulation comprises at least 5×10^6 CFU of bacteria of the genus *Bifidobacterium*, and wherein at least 50% of the bacteria in the bacterial formulation are of the genus *Bifidobacterium*.

21. The method of claim 20, wherein at least 90% of the bacteria in the bacterial formulation are of the genus *Bifidobacterium*.

22. The method of claim 20, wherein the bacteria of the genus *Bifidobacterium* comprise bacteria of the species *Bifidobacterium lactis*, *Bifidobacterium bifidum*, *Bifidobacterium longum*, *Bifidobacterium animalis*, *Bifidobacterium breve*, *Bifidobacterium infantis*, *Bifidobacterium catenulatum*, *Bifidobacterium pseudocatenulatum*, *Bifidobacterium adolescentis*, *Bifidobacterium angulatum*, *Bifidobacterium asteroides*, *Bifidobacterium boum*, *Bifidobacterium choerenum*, *Bifidobacterium coryneforme*, *Bifidobacterium cuniculi*, *Bifidobacterium denticolens*, *Bifidobacterium dentium*, *Bifidobacterium gallicum*, *Bifidobacterium gallinarum*, *Bifidobacterium indicum*, *Bifidobacterium inopinatum*, *Bifidobacterium magnum*, *Bifidobacterium merycicum*, *Bifidobacterium minimum*, *Bifidobacterium pseudolongum*, *Bifidobacterium pullorum*, *Bifidobacterium psychraerophilum*, *Bifidobacterium ruminantium*, *Bifidobacterium saeculare*, *Bifidobacterium scardovii*, *Bifidobacterium simiae*, *Bifidobacterium subtile*, *Bifidobacterium therammcidophi-*

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lum, *Bifidobacterium thermophilum*, *Bifidobacterium tsuruense*, *Bifidobacterium urinalis* or *Bifidobacterium* sp.

23. The method of claim 20, wherein the bacterial formulation is administered by oral administration or rectal administration.

24. The method of claim 23, wherein the bacterial formulation is administered by oral administration.

25. The method of claim 20, wherein the bacterial formulation is administered to the subject in two or more doses.

26. The method of claim 20, further comprising administering to the subject an antibiotic before the bacterial formulation is administered to the subject.

27. The method of claim 20, wherein the immune checkpoint inhibitor is an antibody or antigen binding fragment thereof that binds to CTLA4, PD-1, PD-L1, PD-L2, A2AR, B7-H3, B7-H4, BTLA, KIR, LAG3, TIM-3 or VISTA.

28. The method of claim 20, wherein the immune checkpoint inhibitor is an antibody or antigen binding fragment thereof that binds to PD-1 or PD-L1.

29. The method of claim 20, wherein the immune checkpoint inhibitor is nivolumab, pembrolizumab, pidilizumab, AMP-224, AMP-514, STI-A1110, TSR-042, RG-7446, BMS-936559, BMS-936558, MK-3475, CT O11, MPDL3280A, MEDI-4736, MSB-0020718C, AUR-012 and STI-A1010.

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